



Defendant filed its reply briefs on September 28, 2021. Dkt. Nos. 42 and 41, respectively.<sup>5</sup> Plaintiff filed its sur-reply briefs on October 12, 2021. Dkt. Nos. 47 and 46, respectively.<sup>6</sup> The undersigned held a *Markman* hearing on October 28, 2021. Dkt. No. 57.<sup>7</sup> The undersigned provided the final recommended constructions on November 3, 2021. Dkt. No. 60.<sup>8</sup> This Report does not change any of those recommended constructions.

## **I. BACKGROUND OF THE ASSERTED PATENTS<sup>9</sup>**

### **A. Group 1: U.S. Patent No. 7,477,876**

The '876 Patent is directed to a method of channel quality feedback wherein the rate of reporting the channel quality information ("CQI") varies "as a function of the presence or absence of a transmission from the base station to the mobile station." '876 Patent at Abstract. In particular, the specification describes that "channel quality feedback is provided from the mobile station to the base station at a variable rate such that the feedback rate is faster when the base station is transmitting to the mobile station and slower when there is no transmission occurring." *Id.* at 2:65–3:3. According to the patent, this approach improves the efficiency in how wireless resources are used. More specifically, the specification describes that:

When the base station is not transmitting to the mobile station, the feedback rate for reporting channel quality from the mobile station is at a slower rate, which, in turn, frees up wireless resources that can be used for other purposes, e.g., for

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<sup>5</sup> With regard to W-20-CV-000952-ADA. For subsequently listed cases, Dkt. Nos. 40 and 39, Dkt. Nos. 41 and 40, Dkt. Nos. 41 and 40, Dkt. Nos. 40 and 39, respectively.

<sup>6</sup> With regard to W-20-CV-000952-ADA. For subsequently listed cases, Dkt. Nos. 45 and 44, Dkt. Nos. 46 and 45, Dkt. Nos. 46 and 47, Dkt. Nos. 45 and 46, respectively.

<sup>7</sup> With regard to W-20-CV-000952-ADA. For subsequently listed cases, Dkt. No. 55, Dkt. No. 56, Dkt. No. 56, Dkt. No. 55, respectively.

<sup>8</sup> With regard to W-20-CV-000952-ADA. For subsequently listed cases, Dkt. No. 58, Dkt. No. 59, Dkt. No. 59, Dkt. No. 58, respectively.

<sup>9</sup> The parties did not have any disputed terms for U.S. Patent No. 8,712,708, so the undersigned omits a summary of this patent.

transmissions between the mobile station and the base station. When the base station is transmitting to the mobile station, the rate of reporting channel quality from the mobile station is increased so that rate adaptation can be carried out more accurately by the base station.

*Id.* at 3:7–19.

**B. Group 1: U.S. Patent No. 8,149,776**

The '776 Patent describes an approach to access a wireless network “by sending on a random access channel RACH at a first transmit power a first preamble comprising a signature sequence that is randomly selected from a set of signature sequences” and, if that attempt is unsuccessful, “sending on the RACH at a second transmit power a second preamble comprising a signature sequence, in which the second transmit power is no greater than the first transmit power.” '776 Patent at Abstract. According to the specification, this approach is an improvement on prior art which consumed “needless power” by the UE and required “added computation complexity.”

*Id.* at 2:26–40.

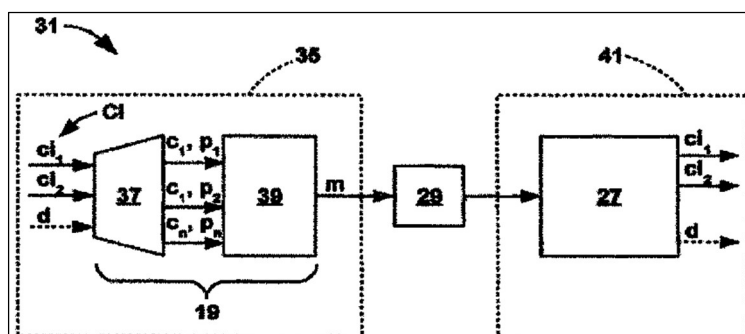
**C. Group 1: U.S. Patent No. 8,767,614**

The '614 patent is directed to sending a buffer information report from the user station to a system station via a relay node, sending an indication that the relay node has different buffering capabilities than the user station, and determining, from the system station end, that the buffering capabilities of the relay node based on the buffer information report and system station. '614 Patent at Abstract. As shown in Figure 2, Relay Node 10 relays information between user equipment (“UE”) 1 and Donor eNB 20 in order “to enlarge the coverage of a [donor] station.” *Id.* at 1:60–61. Because “a relay node can also simultaneously serve multiple user equipments and thus a considerable volume of data may aggregate at the relay node.” *Id.* at 2:59–62. Therefore, “the

buffer of a relay node may be considerably larger and thus far from overflow compared to the buffer of the user equipment.” *Id.* at 2:65–3:2.

**D. Group 2: U.S. Patent No. 9,231,746**

The '746 patent is directed to reliable and efficient transfer of the channel information. '746 Patent at Abstract. Channel information describes the current state of the radio channel between individual terminals and the base station. *Id.* at 1:24–26. Transmission errors may occur when transmitting the channel information, “which may lead to a mismatch between the actual channel state and the channel state represented by the channel information received by the base station.” *Id.* at 1:29–42. The claimed invention proposes encoding the channel information using multi-level coding, wherein each coding level is associated with a detection probability level. Figure 2 illustrates the relationships between the channel information, coding level, and detection probability level.

**Fig. 2**

31	transmission line
35	transmitter element
CI	channel information
ci <sub>1</sub> , ci <sub>2</sub>	channel information subparts
d	data sequence
37	prioritizing element
c <sub>1</sub> , c <sub>2</sub> , c <sub>n</sub>	bit sequences
p <sub>1</sub> , p <sub>2</sub> , p <sub>n</sub>	probability levels
19	encoder
39	mapper
m	mapping information generated by the mapper 39
29	radio channel
27	decoder
41	receiver element

In Figure 2, ci<sub>1</sub> and ci<sub>2</sub> are two subparts of the channel information. *Id.* at 7:35–37. Prioritizing element 37 classifies the channel information subparts by assigning a coding level (e.g., a value between 0 and n) to the subparts according to the importance of each subpart for link adaptation. *Id.* at 7:38–42. Each coding level (e.g., 0 to n) corresponds to a detection probability (e.g., p<sub>1</sub>, p<sub>2</sub>, ..., p<sub>n</sub>). *Id.* at 7:45–47.

The specification describes that assigning a high detection probability to a subpart of the channel information that is important for link adaptation means that this part of the channel information will be transmitted reliably, which leads to reliable link adaptation. *Id.* at 2:38–43.

## II. LEGAL STANDARD

### 1. General Principles

The general rule is that claim terms are generally given their plain-and-ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014), *vacated on other grounds*, 575 U.S. 959, 959 (2015) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”) (internal quotation omitted). The plain-and-ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art<sup>10</sup> in question at the time of the invention.” *Phillips*, 415 F.3d at 1313.

The “only two exceptions to [the] general rule” that claim terms are construed according to their plain-and-ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term,” and “‘clearly express an intent’ to [define] the term.” *Id.* (citation omitted).

“Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent.” *Phillips*, 415 F.3d at 1317. “[D]istinguishing the claimed invention over the prior art, an applicant is indicating what a claim does not cover.” *Spectrum Int’l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1379 (Fed. Cir. 1998). The doctrine of prosecution disclaimer precludes a patentee from recapturing a specific meaning that was previously disclaimed during prosecution. *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). “[F]or

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<sup>10</sup> This Report and Recommendation uses the acronym “POSITA” to abbreviate “Person of Ordinary Skill in the Art.”

prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable.” *Id.* at 1325–26. Accordingly, when “an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

“Although the specification may aid the court in interpreting the meaning of disputed claim language . . . , particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988). “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

Although extrinsic evidence can be useful, it is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent. *Id.* at 1318. Expert testimony may also be helpful, but an expert’s conclusory or unsupported assertions as to the meaning of a term are not. *Id.*

## 2. Means-Plus-Function Claiming

A patent claim may be expressed using functional language. *See* 35 U.S.C. § 112 ¶ 6;<sup>11</sup> *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 (Fed. Cir. 2015). In particular, § 112, ¶ 6 provides that a structure may be claimed as a “means . . . for performing a specified function” and that an act may be claimed as a “step for performing a specified function.” *Masco Corp. v. United States*, 303 F.3d 1316, 1326 (Fed. Cir. 2002).

The presumption is that terms reciting “means” are subject to § 112, ¶ 6. *Williamson*, 792 F.3d at 1348. But if the term does not use the word “means,” then it is presumed not to be subject to § 112, ¶ 6. *Id.* “That presumption can be overcome, but only if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Samsung Elecs. Am., Inc. v. Prisia Eng’g Corp.*, 948 F.3d 1342 (Fed. Cir. 2020) (internal quotations omitted) (citing *Williamson*, 792 F.3d at 1349). “The correct inquiry, when ‘means’ is absent from a limitation, is whether the limitation, read in light of the remaining claim language, specification, prosecution history, and relevant extrinsic evidence, has sufficiently definite structure to a person of ordinary skill in the art.” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286 (Fed. Cir. 2014), *overruled on other grounds by Williamson*, 792 F.3d at 1349.

When § 112, ¶ 6 applies, it limits the scope of the functional term “to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson*, 792 F.3d at 1347. Construing a means-plus-function limitation

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<sup>11</sup>The American Invents Act of 2011 changed the numbering of the relevant subsection from § 112, ¶ 6 to § 112(f). Because the substance of the subsection did not change, the undersigned will refer to the relevant subsection as § 112, ¶ 6 in keeping with the numeration at the time of the patent filing of at least some of the patents.



involves multiple steps. “The first step . . . is a determination of the function of the means-plus-function limitation.” *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). “The next step is to determine the corresponding structure disclosed in the specification and equivalents thereof.” *Id.* A “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Id.* (citation omitted). The focus of the “corresponding structure” inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is “clearly linked or associated with the [recited] function.” *Id.* The corresponding structure “must include all structure that actually performs the recited function.” *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005). However, § 112, ¶ 6 does not permit “incorporation of structure from the written description beyond that necessary to perform the claimed function.” *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

For § 112, ¶ 6 limitations implemented by a programmed general-purpose computer or microprocessor, the corresponding structure described in the patent specification must include an algorithm for performing the function, *i.e.*, the corresponding structure is a processor + algorithm. *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). In this situation, the corresponding structure is not a general-purpose computer but rather the special-purpose computer programmed to perform the disclosed algorithm. *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). The algorithm may be described in “any understandable terms,” such as “a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure.” *Function Media, L.L.C. v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013). Federal Circuit case law does not require that the patent describe an

algorithm “if the selection of the algorithm or group of algorithms needed to perform the function in question would be readily apparent to a person of skill in the art.” *Aristocrat Techs. Austl. Pty Ltd. v. Multimedia Games, Inc.*, 266 F. App’x 942, 947–48 (Fed. Cir. 2008).

Finally, § 112, ¶ 6 does not apply when the claim itself describes the algorithm. *St. Isidore Rsch., LLC v. Comerica Inc.*, No. 2:15-CV-1390-JRG-RSP, 2016 WL 4988246, at \*13 (E.D. Tex. Sept. 19, 2016).

### 3. Indefiniteness

“[I]ndefiniteness is a question of law and in effect part of claim construction.” *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2.<sup>12</sup> A claim, when viewed in light of the intrinsic evidence, must “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). If it does not, the claim fails § 112, ¶ 2 and is therefore invalid as indefinite. *Id.* at 901. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application was filed. *Id.* at 911. Indefiniteness requires clear-and-convincing evidence. *Sonix Tech. Co., Ltd. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

In the context of a claim governed by § 112, ¶ 6, the claim is indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed functions. *Williamson*, 792 F.3d at 1351–52. The disclosure is inadequate when one of ordinary skill in the art “would be unable to recognize the structure in the specification and associate it with the corresponding function in the

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<sup>12</sup> See *supra* note 11.

claim.” *Id.* at 1352. Computer-implemented means-plus-function claims are indefinite unless the specification discloses an algorithm to perform the function associated with the limitation. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1319 (Fed. Cir. 2012).

### III. LEGAL ANALYSIS

#### A. Term #1 (Group 1): “varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station”

Prior to the *Markman* hearing, the undersigned provided a preliminary construction of plain-and-ordinary meaning based on the parties’ aforementioned briefs. During the hearing, the undersigned determining that a plain-and-ordinary meaning construction may be inadequate to resolve the parties dispute, and asked the parties to provide updated proposed constructions. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“When the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.”). The first sub-section below summarizes and analyzes the parties’ arguments in their briefs while the second sub-section does the same for the updated proposed constructions regarding the plain-and-ordinary meaning.

#### 1. Arguments with respect to the Parties’ original proposed constructions

Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station”	Plain and ordinary meaning, which is: varying a rate for reporting information about the status of the communication channel from a mobile station to a base station as a function of the presence or absence of a reception of a data	“varying a rate for reporting channel quality information from a mobile station to a base station using only the mobile station’s detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate, and not

U.S. Patent No. 7,477,876, Claim 1	transmission at the mobile station	varying the rate based on the content of the data transmission or any other message or signal instructing such action.”
Proposed by Defendant		

### **The Parties’ Arguments:**

Defendant first contends that the applicants made a disclaimer during prosecution in order to get around the Chen prior art. Opening (Group 1) at 3–4. More specifically, Defendant contends that Chen “disclosed varying transmission rates based on receiving an instruction from the base station” while the claimed invention was “limited to adjusting the data rate using only the detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate.” *Id.* at 4. For example, Defendant contends that the applicants characterized Chen and the claimed invention as follows:

In Chen, the rate of transmission ... is varied as a function of the mobile receiving an instruction from the base station before (i.e., in preparation of) the base station sending the data transmission to the mobile. Accordingly, Chen does not teach varying feedback from the mobile based on the absence or presence of a data transmission from the base station to the mobile.

*Id.* at 5 (quoting *id.*, Ex. D (Aug. 6, 2004 Response to Final Rejection) at 5 (emphasis in original)); *see also id.*, Ex. C (Feb. 2, 2004 Response to Non-Final Rejection) at 6–7, Ex. D at 5. Based on those characterizations of the prior art and the invention, Defendant contends that the Applicants clearly and unambiguously disavowed Chen’s purported approach of “varying the transmission rate based on the content of the data transmission or any other message or signal instructing such action.” *Id.* at 5. Defendant contends that its proposed construction incorporates this alleged disclaimer. *Id.* at 6.

Defendant also contends that the specification supports its proposed construction. *Id.* at 6–7. In particular, Defendant contends that the specification discloses that the channel quality feedback is provided at a variable rate “such that the feedback rate is faster when the base station is transmitting to the mobile station and slower when there is no transmission occurring.” *Id.* (quoting ’876 Patent at 2:65–3:3). As such, at least according to Defendant, “the rate is a function of the presence or absence of a data transmission and not based on the content of a message or direction from the base station.” *Id.* at 6 (citing ’876 Patent at 3:4–7, 5:1–4, Fig. 1).

In its response, Plaintiff contends that Defendant’s proposed construction improperly narrows the claim. Response (Group 1) at 3. More specifically, Plaintiff contends that:

While claim 1 requires that the reporting rate be varied “as a function of the presence or absence of a reception of a data transmission at the mobile station,” neither claim 1 nor anywhere else in the intrinsic record supports a construction that would limit use to only that information, to the exclusion of any other information, as a basis for varying the rate.

*Id.* at 3 (emphasis in original). Plaintiff contends that, by contrast, “Applicants never stated that the claims permitted the reporting rate to be varied using ‘only’ the mobile station’s detection of the presence or absence of a data transmission.” *Id.*

Plaintiff further contends that Defendant’s proposed construction applies the Applicant’s statements “more broadly than the context in which they were made.” More specifically, Plaintiff contends that during prosecution, “Applicants asserted that Chen disclosed varying the rate using only an instruction (*i.e.*, the content of a data transmission), but notably did not disclose varying the rate as a function of the presence or absence of a reception of a data transmission at the mobile station, as recited in the claims.” *Id.* Plaintiff contends that these statements are not a “a clear and unmistakable disavowal of the technique disclosed in Chen,” but “merely noted what the plain

language of claim 1 requires: that the reporting rate be varied as a function of the presence or absence of a reception of a data transmission at the mobile station.” *Id.*

Plaintiff further contends that Defendant’s proposed construction incorrectly excludes “the use of inter-process communications within the mobile device, which can be used, for example, to detect the absence or presence of data transmission from the base station” when the Applicants did not make any statements to that effect. *Id.* at 3–4.

In its reply, Defendants make two arguments. First, Defendant contends that Plaintiff conceded that (1) “Applicants asserted that Chen disclosed varying the rate using only an instruction (*i.e.*, the content of a data transmission)” and (2) “that Applicant’s remarks ‘differentiated the claimed invention from the usage of a ‘separate signaling message from the base station.’” Reply (Group 1) at 2. Defendant contends that “[t]hese admissions confirm the need for the Court to adopt OnePlus’s construction clarifying that the claims do not encompass varying the rate based on the ‘the reception of an actual data transmission.’” *Id.* Second, Defendant contends that “an argument made to distinguish prior art will narrow the scope of a claim regardless whether an Applicant explicitly asserts that the claims are limited to ‘only’ the distinguishing feature.” *Id.* at 2 (citing *Seachange Intern., Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1372 (Fed. Cir. 2005)).

In its sur-reply, with respect to the second argument, Plaintiff contends *Seachange* is inapposite because the issue in that case was whether prosecution statements that the applicant made to distinguish some claims from prior art applied to all claims. Sur-Reply (Group 1) at 2. Applicant in that case identified one pending claim as being representative and never articulated that the distinguishing statements only applied to some claims. *Id.* With respect to the first argument, Plaintiff contends that the Applicants’ prosecution statement does not rise to the level of a clear and unmistakable because “applicant emphasized the absence of [or presence of a data

transmission from the base station to the mobile station] in the prior art, rather than the absence of an element of the prior art in the claims.” *Id.* at 2–3.

**The Special Master’s Analysis:**

After carefully considering the parties’ arguments and the applicable law, the undersigned agrees with Plaintiff that Applicant’s prosecution statements do not meet the “exacting” standard required to find there was a disclaimer. *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014).

Chen discloses estimating the power necessary to send data at a higher rate, sending a notification from the transmitter to the receiver that the transmitter will switch to a higher transmission rate, and then transmitting at the higher data rate. Chen (U.S. Patent No. 6,068,458) at 4:16–25 (“When the transmitter receives data for transmission at a high rate, the transmitter first estimates the signal power required to send the data at the high rate, changes the signal power to match the estimated power, and then sends the data signals at the high rate. The method estimates the signal power required and includes the steps of: (a) operating the transmitter at an idle rate; (b) receiving the data for a high rate transfer; (c) estimating a high rate power level; (d) sending a high rate notification to the receiver; and (e) sending the data at the high rate.”). By contrast, in the claimed invention, the mobile station changes its transmission rate based on the mobile station’s detection of the absence or presence of a data transmission from the base station to the mobile station. ’876 Patent at Abstract (“A channel quality feedback method for wireless transmission is described in which the rate for reporting channel quality information from a mobile station to a base station is variable as a function of the presence or absence of a transmission from the base station to the mobile station.”). The Abstract further describes that “the feedback rate from the mobile station to the base station is increased when the mobile station detects a transmission from

the base station. As such, the feedback rate is slower when there is no data transmission for the mobile station and faster when the mobile station is receiving data.”<sup>13</sup> *Id.* The claimed invention also does not describe using an explicit notification to tell the mobile station that the base station will switch to a higher transmission rate. *See, e.g., id.* at Cl. 1.

Based on this understanding of Chen and the claimed invention, the undersigned does not find that the Applicants’ prosecution statements rise of the level of a prosecution disclaimer. More specifically, rather than narrowing the claim scope in order to differentiate the claimed invention from the Chen prior art reference, Applicants’ prosecution statements simply describe how what was missing in Chen, namely, varying the rate based on the presence or absence of a received data transmission. The Applicants’ statement in the August 6, 2004, Response to Final Rejection illustrates this difference. In that Response, Applicants argued that:

In Chen, the rate of transmission ... is varied as a function of the mobile receiving an instruction from the base station before (i.e., in preparation of) the base station sending the data transmission to the mobile. Accordingly, Chen does not teach varying feedback from the mobile based on the absence or presence of a data transmission from the base station to the mobile.

Opening (Group 1), Ex. D. (August 6, 2004 Response to Final Rejection) at 5 (emphasis in original). The words that the Applicants underlined in this passage describe two key differences between Chen and the claimed invention. First, by underlining the word “instruction,” the Applicants highlighted the fact that Chen uses an explicit instruction to notify the receiver (the mobile station) that the transmitter (base station) is about to change the data rate. By contrast, in the claimed invention, the mobile station changes the rate of sending CQI feedback based on

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<sup>13</sup> The reason the mobile station sends channel quality information more frequently when the mobile station receives data from the base station is because the base station needs to know the latest/most accurate CQI when it is transmitting information on channel in order to maximize the data rate and/or reduce the transmitted power. By contrast, when the base station is not transmitting data on the channel, the base station does not need frequent CQI updates as the base station is not actively transmitting on the channel.



whether the mobile station is receiving a data transmission from the base station (*i.e.*, channel is being used for data transmission), and not based on receiving an instruction to increase the rate of CQI feedback. Second by underlining the word “before,” the Applicants highlighted the fact that in Chen, the instruction is sent prior to changing the data rate. By contrast, in the claimed invention, the mobile station changes the rate of CQI feedback during data transmission. As such, the undersigned does not find that there was a clear and unmistakable disclaimer during prosecution. *Liebel-Flarsheim*, 358 F.3d at 900.

Even if there was a prosecution disclaimer, Defendant’s proposed construction improperly expands the scope of the alleged disclaimer. More specifically, suppose that the Applicants disclaimed the approach described in Chen (sending an instruction prior to data transmission). Defendant’s proposed construction improperly expands the scope of the alleged disclaimer by not only excluding the approach in Chen, but excluding all approaches other than using “only the mobile station’s detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate.” In other words, Defendant’s proposed construction incorrectly excludes any “middle ground” between the approach in Chen (sending an instruction prior to data transmission) and detecting the presence or absence of an actual data transmission from the base station.

In addition, the claim language explicitly contradicts this part of Defendant’s proposed construction. In particular, the claim language explicitly provides that the rate is varied “as a function of the presence or absence of a reception of a data transmission at the mobile station,” and not “only the mobile station’s detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate.” Furthermore, none of the prosecution statements Defendant points to limits varying the rate to “only” detecting the presence

or absence of an actual data transmission. Opening (Group 1), Ex. C (Feb. 2, 2004 Response to Non-Final Rejection) at 6 (“based on” the absence or presence of a data transmission), Ex. C (Feb. 2, 2004 Response to Non-Final Rejection) at 6–7 (“[u]sing the actual data transmission from the base station as a trigger”), Ex. D. (Aug. 6, 2004 Response to Final Rejection) at 5 (“depending on whether there is an absence or presence of a data transmission”) (underlining removed), Ex. D. (Aug. 6, 2004 Response to Final Rejection) at 5 (“based on the absence or presence of a data transmission from the base station to the mobile.”).

For the reasons described herein, the undersigned does not find that Applicants’ statements meet the exacting standard necessary to support a finding of a prosecution disclaimer. Therefore, the undersigned recommends that the Court reject Defendant’s original proposed construction. Furthermore, because Defendant has not alleged lexicography, the undersigned recommends adopting plain-and-ordinary meaning—with additional clarification as to the scope of plain-and-ordinary meaning (see next sub-section)—as the Court’s construction.

## **2. Parties’ updated proposed constructions regarding the plain-and-ordinary meaning**

<b>Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station”  U.S. Patent No. 7,477,876, Claim 1  Proposed by Defendant	“varying a rate for reporting information about the status of the communication channel from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station, and not solely based on the content of the data transmission”	“data transmission” should be construed according to its plain and ordinary meaning, except that it does not include an instruction, such as a control signal

**The Parties' Positions:**<sup>14</sup>

Plaintiff contends that its alternative proposal clarifies that “as long as a system varies the reporting rate at least ‘as a function of the presence or absence of a reception of a data transmission at the mobile station,’ it is covered by claim 1 of the ’876 patent.” Plaintiff contends that Defendant’s proposed construction improperly attempts to exclude “data transmission [that] happened to contain an instruction such as a control signal” as it is supported by the intrinsic record.

Defendant contends its proposed updated construction conforms to the claim language as narrowed by the applicants’ arguments during prosecution and incorporates the undersigned’s observations during the *Markman* hearing that the prosecution statements were “more precisely directed towards distinguishing a ‘data transmission’ from an ‘instruction’ such as a control signal.” Defendant further contends that Plaintiff’s updated proposed construction “fails to distinguish between a data transmission and an instruction” and fails to capture the Applicants’ disclaimer that the rate is “varied based on the data transmission and ‘not instructions.’”

**The Special Master’s Analysis:**

After carefully considering the parties’ arguments and the applicable law, the undersigned declines to recommend either party’s updated proposed construction. With respect to Plaintiff’s updated proposed construction, the key difference between that proposed construction and the claim term is that the former adds “and not solely based on the content of the data transmission.” Plaintiff’s updated proposed construction appears to be directed to providing an express construction for “as a function of.” Because the plain-and-ordinary meaning “as a function of”

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<sup>14</sup> In addition to e-mailing the undersigned updated proposed constructions, the parties also e-mailed short position statements in support of their updated proposed constructions.

includes what follows, but is not limited only to what follows, the undersigned believes that it would be redundant—and thus potentially confusing to a jury—to include this aspect of Plaintiff’s updated proposed construction in the undersigned’s recommended construction. *United States Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (claim construction is “not an obligatory exercise in redundancy”). Nevertheless, in order to resolve the dispute, the undersigned recommended including “the plain-and-ordinary meaning of ‘function of’ includes what follows, but is not limited only to what follows” as a note not for the jury.<sup>15</sup>

The other issue with Plaintiff’s updated proposed construction is that it improperly rewrites the claim term. More specifically, the claim language recites that the reporting rate varies “as a function of the presence or absence of a reception of a data transmission,” while Plaintiff’s updated proposed construction recites “not solely based on the content of the data transmission.” In other words, the difference between the two is that the former only requires that varying the rate depends upon whether the mobile station receives the data transmission while the latter incorrectly requires that varying the rate depends upon both the reception and also the content of the data transmission.

With respect to Defendant’s updated proposed construction, the undersigned believes that a POSITA would understand that a “data transmission” excludes control signals/instructions. But because the undersigned believes that including Defendant’s negative limitation may confuse a jury, the undersigned believes it is better to include it as guidance for the parties only, *i.e.*, a note not for the jury.

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<sup>15</sup> Because this note may confuse a jury, the undersigned believes it is better to include it as guidance for the parties only, *i.e.*, a note not for the jury. *Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1366 (Fed. Cir. 2004) (“The district court simply must give the jury guidance that ‘can be understood and given effect by the jury once it resolves the issues of fact which are in dispute.’” (internal citation omitted)).

Therefore, based on the foregoing, the undersigned recommends that this term should be construed according to its plain-and-ordinary meaning with two notes not for the jury:

- 1) The plain-and-ordinary meaning of “function of” includes what follows, but is not limited only to what follows.
- 2) The plain-and-ordinary meaning of “data transmission” excludes control signals/instructions.

**B. Term #2 (Group 1): “[transmitter] attempting access to a wireless network” / “transmitter configured to attempt access to a wireless network...”**

Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>“[transmitter] attempting access to a wireless network” (Claim 1) / “transmitter configured to attempt access to a wireless network...” (Claim 10)</p> <p>U.S. Patent No. 8,149,776, Claims 1, 10</p> <p>Proposed by Defendant</p>	<p>Plain and ordinary meaning. This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite.</p>	<p>This claim should be construed under 35 U.S.C. 112, ¶ 6.</p> <p><b>Function:</b> attempting access to a wireless network by sending on a random access channel at a first transmit power a first preamble comprising a signature sequence and by randomly selecting the signature sequence from a set of signature sequences</p> <p><b>Structure:</b> none disclosed. The claim is indefinite.</p>

**1. Whether § 112, ¶ 6 applies**

**The Parties’ Arguments:**

Defendant contends that this term should be subject to § 112, ¶ 6 because:

“Transmitter” is not sufficient structure because the claimed function requires randomly selecting the signature sequence from a set of signature sequences. Randomly selecting a signature sequence is not one of the basic functions of a transmitter. Rather, performing this function requires additional structure (*e.g.*, a

microprocessor or general-purpose computer executing a specialized algorithm) that is not recited in the claims.

Opening (Group 1) at 10.

In its response, Plaintiff contends that this term is not subject to § 112, ¶ 6 for at least the following reasons. Response (Group 1) at 5–7. **First**, Plaintiff contends that the term does not use the word “means,” therefore, the presumption is that § 112, ¶ 6 does not apply. *Id.* at 5. **Second**, Plaintiff contends that “transmitter” has a well-understood meaning in the art. *Id.* at 6. The term “transmitter” connotes sufficient structure to a POSA and should not be construed under § 112, ¶ 6. *Id.* (citing *Finjan, Inc. v. Qualys Inc.*, No. 4:18-CV-7229, 2020 WL 3101040, at \*15–16 (N.D. Cal. June 11, 2020)). Plaintiff contends that “transmitter configured to” similarly also does not trigger § 112, ¶ 6. *Id.* (citing *Huawei Techs. Co. Ltd. v. T-Mobile US, Inc.*, No. 2:16-cv-57, 2017 WL 2691227, at \*25–27 (E.D. Tex. June 22, 2017)). **Third**, Plaintiff contends that the transmitter elements connote sufficient structure to avoid means-plus-function treatment. *Id.* More specifically, Plaintiff contends that “[a] POSA would understand from the claims that the transmitter is a component that would send signals to access a wireless network, and communicate with other components of the device, such as the processor.” *Id.* (citing *id.*, Ex. G (Cooklev Decl.) at ¶¶ 39-40). **Fourth**, Plaintiff contends that “nowhere do the claims indicate that the transmitter itself must perform the random selection process.” *Id.* at 7. Plaintiff contends that the components within the UE performs the random selection process and not the transmitter itself. *Id.* (citing ’776 Patent at 2:44-3:34 (“[T]he processing means randomly selects from a set of signature sequences.”), 5:62-6:24 (“[T]he UE randomly selects a signature sequence and submit a first preamble that has the randomly generated/selected signature sequence on the RACH”) 3:55-57, 3:61-64, 4:63-5:17, 9:22-41, 10:19-49, 11:26-60, Figs. 3, 5, 6A, 6B). *Id.* Plaintiff contends that

even if this argument is incorrect, § 112, ¶ 6 does not necessarily apply because there could be a processor embedded within the transmitter that does this selection. *Id.*

In its reply, Defendant contends that Plaintiff does not dispute that the transmitter “fails to recite sufficient structure to perform the claimed function of ‘randomly selecting the signature sequence from a set of signature sequences.’” Reply (Group 1) at 3. Defendant also contends that *Huawei* is distinguishable because the transmitter in *Huawei* was only configured to send and receive, while in this case, the transmitter does more than send. *Id.* at 4. Finally, with respect to Plaintiff’s contention that components within the UE performs the random selection process and not the transmitter itself, Defendant contends claims 1 and 10 do not recite a processor or memory. *Id.* at 4.

In its sur-reply, Plaintiff reiterates that the term “transmitter” does not require construction and has a plain and ordinary meaning that a POSITA would “readily” understand. Sur-Reply (Group 1) at 4. Plaintiff points out that Defendant does not even allege that a POSITA would not understand the meaning of this term. *Id.* Plaintiff further contends that “is randomly selected” is an adjective and not a verb and that the claim language only requires that the transmitter transmit the randomly selected signature string. *Id.*

#### **The Special Master’s Analysis:**

After carefully considering the parties’ arguments and the applicable law, the undersigned agrees with Plaintiff that “transmitter” is not subject to § 112, ¶ 6 and should have its plain-and-ordinary meaning for the reasons that follow. **First**, because the term (and, more generally, the claims) do not use the word “means,” the presumption is that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1348. **Second**, “transmitter” is a term of art that has a very well-understood meaning

to a POSITA. For example, Plaintiff’s expert, Dr. Cooklev, opined that “[t]he term ‘transmitter’ is a commonly used and well-understood term in the art that connotes structure to a person of ordinary skill in the art, who would understand a ‘transmitter’ to refer to a combination of hardware and software that is capable of transmitting a signal.” Plaintiff’s Response (Group 1), Ex. G at ¶ 39. By contrast, Defendant does not allege that a POSITA would not understand the meaning of this term, let alone provide any evidence (*e.g.*, an expert declaration) that would indicate that a “transmitter” would is not a well-understood term and that connotes structures to a POSITA. *Dyfan, LLC v. Target Corp.*, 28 F.4d 1360, 1368 (Fed. Cir. 2022) (“Dr. Goldberg’s unrebutted testimony demonstrates that the ‘code’/‘application’ limitations here connote a class of structures to a person of ordinary skill.”). Based on the undersigned’s education and experience, the undersigned agrees with Dr. Cooklev that a POSITA would understand that the term “transmitter” refers to a combination of hardware and software that is capable of transmitting a signal and connotes structure to a POSITA. Accordingly, a POSITA would understand that the term “transmitter” also connotes sufficient structure to prevent the application of § 112, ¶ 6. *See, e.g., Finjan*, 2020 WL 3101040 at \*15–16; *Huawei Techs.*, 2017 WL 2691227 at \*25–27 (finding that “transmitter configured to send” was not subject to § 112, ¶ 6).

**Third**, the surrounding claim language also provides structure by describing the transmitter’s operation. *Apple*, 757 F.3d 1286 at 1299 (Fed. Cir. 2014), *overruled on other grounds by Williamson*, 792 F.3d at 1349 (“Structure may also be provided by describing the claim limitation’s operation, such as its input, output, or connections.”). For example, both claims 1 and 10 describe that the transmitter transmits information (first preamble comprising a signature sequence) on a wireless network. *See, e.g.,* ’776 Patent, Cl. 1, Lim. [a] (“attempting access to a wireless network by sending from a transmitter on a random access channel at a first transmit



power a first preamble comprising a signature sequence”). As a second example, Claim 10 describes that the transmitter is coupled to a processor such that the latter causes the former to retransmit the signature sequence (at a second transmit power). *Id.*, Cl. 10, Lim. [b] (“a processor configured to determine that the access attempt from the first preamble was unsuccessful, and responsive to such determining to cause the transmitter to re-attempt access to the wireless network by causing the transmitter to send on the random access channel at a second transmit power a second preamble comprising a signature sequence”). Because the surrounding claim language describes the output of the transmitter in both claims and the input to the transmitter in Claim 10, the surrounding claim language provides structure for this term.

With respect to Defendant’s arguments, the undersigned does not find them to be persuasive for the reasons that follow. **First**, with respect to Defendant’s argument that the transmitter is not sufficient structure to perform the claimed function of “randomly selecting the signature sequence from a set of signature sequences,” the undersigned agrees with Plaintiff that the claim language only requires that the transmitter transmit the randomly selected signature string. The claim language does not go so far as to require that the transmitter randomly select the signature sequence from a set of signature sequences. Rather, the claim language only requires that the signature sequence is randomly selected, but does not specify that a particular entity, *e.g.*, the transmitter, does the random selection. *Id.*, Cl. 1, Lim. [a] (“by sending from a transmitter on a random access channel at a first transmit power a first preamble comprising a signature sequence that is randomly selected from a set of signature sequences”), Cl. 10, Lim. [a] (“by sending on a random access channel at a first transmit power a first preamble comprising a signature sequence that is randomly selected from a set of signature sequences”). Similarly, Defendant’s argument that *Huawei* is distinguishable because the transmitter in *Huawei* was only configured to send and

receive, while the transmitter in this case also allegedly selects a signature sequence at random is not persuasive for the same reason.

*Second*, the undersigned disagrees with Defendant’s contention that because claims 1 and 10 do not recite a processor or memory, the transmitter—and not those components—must randomly select a signature sequence. More specifically, the specification describes that the UE—and not necessarily the transmitter within the UE—randomly selects a signature sequence. *Id.* at 5:64–65. By contrast, Defendant does not appear to point to any intrinsic evidence that describes that the only transmitter can randomly select a signature sequence. Rather, Defendant appears to merely assume that the claim requires such a requirement.

For the reasons described herein, the undersigned does not find that Defendant has overcome the presumption that this term is not subject to § 112, ¶ 6. As such, the undersigned recommends that the term “transmitter” should not be subject to § 112, ¶ 6.

Because the undersigned does not find that this term is subject to § 112, ¶ 6, there is no need to determine the corresponding structure for this term.

Finally, because the “heavy presumption” is a term should be construed according to its plain-and-ordinary meaning and because Defendant has not provided any argument or evidence that this term should not be construed according to its plain-and-ordinary meaning, the undersigned recommends that the term “transmitter” should be construed according to its plain-and-ordinary meaning.

**C. Term #3 (Group 1): “processor”**

<b>Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“processor”  U.S. Patent No. 8,149,776, Claims 10, 11, 12, 14, 15, 16, 18, 19 Proposed by Defendant	Plain and ordinary meaning. This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite.	This claim should be construed under 35 U.S.C. 112, ¶ 6.  <b>Function:</b> determining that access attempts are unsuccessful  <b>Structure:</b> none disclosed. The claim is indefinite.

**1. Whether § 112, ¶ 6 applies****The Parties’ Arguments:**

Defendant makes the following arguments in support of its proposed construction that this term should be subject to § 112, ¶ 6. First, Defendant contends that this is a nonce word. Opening (Group 1) at 11–12 (citing *Dyfan, LLC v. Target Corp.*, 6:19-cv-179-ADA, Dkt. No. 57 at 20 & n.4 (W.D. Tex. 2020)). Second, Defendant contends that “even if ‘processor’ refers to a conventional CPU or microprocessor, there is still insufficient structure recited in the claim because the claim does not recite an algorithm for either a CPU or microprocessor to execute to perform the claimed functions.” *Id.* at 12. Third, Defendant points to *WSOU Investments, LLC v. Google LLC*, No. 6:20-cv-00571-ADA, Dkt. No. 49 (W.D. Tex. June 2, 2021) as an example where this Court has previously found that “processor” was subject to § 112, ¶ 6.” *Id.* at 12–13.

Plaintiff contends that this term is not subject to § 112, ¶ 6 for at least the following reasons. First, because the term does not use the word “means,” the presumption is that § 112, ¶ 6 does not apply. Response (Group 1) at 9. Second, Plaintiff contends that the term “processor” itself is not a

nonce word, but rather, it connotes a class of structures. *Id.* More specifically, Plaintiff contends that “processor” is “commonly understood to refer to the component of a computer that executes software instructions and performs computations” and “generally refers to a tangible object that can be purchased and that can perform certain functions even without specific instructions.” *Id.* at 9–10. Third, Plaintiff contends that the independent and dependent claims provide sufficient structure to avoid means-plus-function treatment. *Id.* at 11 (citing *Id.*, Ex. G (Cooklev Decl.) at ¶¶ 51–52). In particular, Plaintiff contends that the claims describe how the processor interacts with other structures like the transmitter and memory. *Id.* at 11.

In response to Defendant’s arguments, Plaintiff first contends that reliance on *Dyfan* is “misplaced.” Response at 11. Plaintiff then contends that this Court in Plaintiff points out that in *WSOU v. Google*, the Court found some processor terms to be plain-and-ordinary meaning. Sur-Reply (Group 1) at 7.

### **The Special Master’s Analysis:**

After carefully considering the parties’ arguments and the applicable law, the undersigned agrees with Plaintiff that “processor” is not subject to § 112, ¶ 6 and should have its plain-and-ordinary meaning for the reasons that follow. **First**, because the term (and, more generally, the claims) do not use the word “means,” the presumption is that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1348. **Second**, the term “processor” is the component of a computer that executes software. As such, a POSITA would understand that it connotes a class of structures.<sup>16</sup> **Third**, the surrounding claim language in the independent and dependent claims also provides structure by

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<sup>16</sup> The undersigned did computer architecture (*i.e.*, processor) research and development for approximately 10 years before to the priority date of the ’876 Patent, and knows that a POSITA would understand that the term “processor” connotes a class of structures.

describing the processor's operation. *Apple*, 757 F.3d at 1299. For example, Claim 10 describes that the processor is directly or indirectly coupled to the transmitter. '876 Patent, Cl. 10, Lim. [a] ("a processor configured to determine ... and responsive to such determining to cause the transmitter to re-attempt access..."); *see also* '876 Patent, Cl. 18, Lim. [a]. Claim 11 describes that the processor is also coupled to the receiver. *Id.*, Cl. 11, Lim. [b] ("wherein the processor is configured to determine that the access attempt from the first preamble was unsuccessful by tuning a receiver of the apparatus"). Claim 12 describes that the processor is coupled to a memory. *Id.*, Cl. 12, Lims. [b]–[c] ("the apparatus further comprises a memory storing the received parameters and wherein the processor is further configured to determine from the parameters..."); *see also id.*, Cl. 15, Lim. [a], Cl. 16, Lims. [b]–[c].

For the reasons described herein, the undersigned does not find that Defendant has overcome the presumption that this term is not subject to § 112, ¶ 6. As such, the undersigned recommends that the term "processor" should not be subject to § 112, ¶ 6.

Because the undersigned does not find that this term is subject to § 112, ¶ 6, there is no need to determine the corresponding structure for this term.

Finally, because the "heavy presumption" is a term should be construed according to its plain-and-ordinary meaning and because Defendant has not provided any argument or evidence that this term should not be construed according to its plain-and-ordinary meaning, the undersigned recommends that the term "processor" should be construed according to its plain-and-ordinary meaning.

**D. Term #4 (Group 1): “program of instructions”**

<b>Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“program of instructions”  U.S. Patent No. 8,149,776, Claim 19  Proposed by Defendant	Plain and ordinary meaning. This claim should not be construed under 35 U.S.C. 112, ¶ 6, nor is it indefinite.	Preamble limiting; This claim should be construed under 35 U.S.C. 112, ¶ 6.  <b>Function:</b> attempting access to a wireless network by sending a signature sequence on a random access channel  <b>Structure:</b> none disclosed. The claim is indefinite.

**1. Whether § 112, ¶ 6 applies****The Parties’ Arguments:**

The parties’ argument for this term are similar to those for the previous term. Defendant contends that, like the “transmitter” and “processor” terms, the term “program of instructions” “fails to recite ‘sufficiently definite structure’ by replacing the term ‘means’ with ‘program of instructions.’” Opening (Group 1) at 13–14; Reply (Group 1) at 7. Defendant contends that just because “a term is ‘commonly used’ does not mean it has sufficient structure.” Reply (Group 1) at 7.

Plaintiff contends that this term is not subject to § 112, ¶ 6 for at least the following reasons. Response (Group 1) at 13–15. First, the term does not use the word “means,” therefore, the presumption is that § 112, ¶ 6 does not apply. *Id.* at 13.

Second, Plaintiff contends that the term “program for instructions” refers to software containing a set of instructions that carry out a task which, in the context of Claim 19, connotes

sufficient structure to avoid § 112, ¶ 6 treatment. *Id.* at 13–14 (citing *Zeroclick, LLC v. Apple Inc.*, 891 F.3d 1003, 1008 (Fed. Cir. 2018)). More specifically, Plaintiff contends that the word “instruction” itself connotes structure.” *Id.* at 14 (citing *Syncpoint Imaging, LLC v. Nintendo of Am. Inc.*, No. 2:15-cv-00247-JRG-RSP, 2016 WL 55118, at \*23 (E.D. Tex. Jan. 5, 2016)). Furthermore, Plaintiff contends that Claim 19 itself recites the objectives and operations of the instructions, *e.g.*, “the “program of instructions” must be stored in memory, be executable by a processor and, when executed, should attempt (and re-attempt) access to a wireless network by sending a preamble comprising a randomly selected signature sequence on a random access channel, *etc.*” *Id.* at 14. Plaintiff additionally contends that a POSITA “would know how to set up software to send a signature sequence on a random access channel to attempt to access a wireless network, determine if the attempt was successful, and use that information to determine whether to re-attempt access.” *Id.*

In its sur-reply, Plaintiff contends that Defendant’s reliance on *Dyfan* is “misplaced.” Sur-Reply (Group 1) at 8. More specifically, Plaintiff contends that “claim 19, unlike the claim at issue in *Dyfan*, indicates to a POSA what information the program of instructions will generate and receive and how it will interact with other components to attempt access of a wireless network.” *Id.* at 8.

### **The Special Master’s Analysis:**

After carefully considering the parties’ arguments and the applicable law, the undersigned agrees with Plaintiff that “program of instructions” is not subject to § 112, ¶ 6 and should have its plain-and-ordinary meaning for the reasons that follow.<sup>17</sup> **First**, because the term (and, more

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<sup>17</sup> Although Defendant’s proposed construction was that the preamble was limiting, Defendant does not appear to make any argument why the preamble was limiting. By contrast, Plaintiff’s proposed construction was silent as to

generally, the claims) do not use the word “means,” the presumption is that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1348. **Second**, the undersigned agrees with Plaintiff that the term “program of instructions” connotes structure sufficient to avoid means-plus-function treatment. In particular, the undersigned agrees with Plaintiff that the term “program of instructions” connotes sufficient structure because the claim “recites the objectives and operations of the instructions.” *Syncpoint*, , 2016 WL 55118 at \*23 (citing *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1320 (Fed. Cir. 2004)). Claim 19 recite the objectives and operations of the instructions in the “program of instructions” limitations:

- Memory stores the “program of instructions”
- Processor executes those instructions
- When executed, the instructions cause the transmitter to “attempt[] access to a wireless network by sending on a random access channel at a first transmit power a first preamble comprising a signature sequence that is randomly selected from a set of signature sequences”
- When the first attempt was unsuccessful, the instructions cause the transmitter to “re-attempt[] access to the wireless network by sending on the random access channel at a second transmit power a second preamble comprising a signature sequence, in which the second transmit power is no greater than the first transmit power”

The undersigned agrees with Plaintiff that “[m]emory, processors, random access channels, preambles, and signature sequences are well-understood structural components of electronic communication devices.” Response (Group 1) at 14.

For the reasons described herein, while the undersigned finds that this is a closer call than the previous claim term, the undersigned does not find that Defendant has overcome the

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whether the preamble was limiting, but Plaintiff may have conceded it was limiting because it did not argue that the preamble was not limiting and because Plaintiff provided a construction for this term. Based on Plaintiff’s apparent concession that the preamble is not limiting and as the preamble appears to give “life and vitality” to the claim, the undersigned recommends that the preamble is limiting.



presumption that this term is not subject to § 112, ¶ 6. As such, the undersigned recommends that the term “program of instructions” should not be subject to § 112, ¶ 6.

Because the undersigned does not find that this term is subject to § 112, ¶ 6, there is no need to determine the corresponding structure for this term.

Finally, because the “heavy presumption” is a term should be construed according to its plain-and-ordinary meaning and because Defendant has not provided any argument or evidence that this term should not be construed according to its plain-and-ordinary meaning, the undersigned recommends that the term “program of instructions” should be construed according to its plain-and-ordinary meaning.

**E. Term #5 (Group 1): “means for causing sending of a buffer information report to a system station” / “at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus ... sending of a buffer information report to a system station”**

Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“means for causing sending of a buffer information report to a system station” (Claim 6) “at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus ... sending of a buffer information report to a system station” (Claim 13).  U.S. Patent No. 8,767,614, Claims 6, 13  Proposed by Defendant	These terms are not indefinite. No construction necessary – plain and ordinary meaning.  Claim 13 should not be construed under 35 U.S.C. § 112, ¶ 6. To the extent the Court treats the terms as means-plus-function:  <b>Function:</b> “for causing sending of a buffer information report”  <b>Structure:</b> processor and memory (refer 6:4-9).	This claim should be construed under 35 U.S.C. 112, ¶ 6.  <b>Function:</b> causing sending of a buffer information report to a system station.  <b>Structure:</b> none disclosed. The claim is indefinite.

### 1. Whether § 112, ¶ 6 applies (Claims 6 and 13)

#### **The Parties' Arguments:**

With respect to the term in Claim 6 (“means for causing sending of a buffer information report to a system station”), Defendant contends that § 112, ¶ 6 applies because it 1) recites “means” and 2) there is no structure. Opening (Group 1) at 17. Plaintiff concedes. *See* Response (Group 1) at 17–20.

With respect to the term in Claim 13 (“at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus ... sending of a buffer information report to a system station”), Defendant contends that although the claim recites “processor,” “memory,” and “computer program code,” all of these are nonce words. Opening (Group 1) at 19. Defendant contends that multiple nonce words does not equal to sufficient structure. *Id.* at 19–20. Defendant further contends that the specification confirms that “the processor, memory, and program code of claim 13 are nothing more than black-box placeholders requiring specific algorithms to perform the recited functions.” *Id.* at 20 (citing ’614 Patent at 10:20–22).

In its response, Plaintiff first contends that the term does not use the word “means;” therefore, the presumption is that § 112, ¶ 6 does not apply. Response (Group 1) at 13. Plaintiff next contends that “computer program code,” “processor,” and “memory” are all well-understood structural components of electronic devices and do not invoke § 112, ¶ 6 in the context of claim 13. *Id.* at 18 (citing cases). Plaintiff then contends that:

Claim 13 indicates to a POSA how the “computer program code,” “processor,” and “memory” interact with one another to send of a buffer information report to a

system station, including by sending the information from a node for relaying communications between a user station and the system station, and generating the report based on report format used for uplink reporting by a user station.

*Id.* at 19.

In its reply, Defendant responds that “well understood” components do not connote sufficient structure to avoid means-plus-function treatment and are exactly the type of nonce words that invoke § 112, ¶ 6.” Reply (Group 1) at 9. Defendant also points to the Court’s claim constructions in *WSOU v. Google* which involved similar terms. *Id.* at 9 (citing *WSOU v. Google*, 6:20-cv-00571-ADA, Dkt. No. 46 at 1–2). Defendant contends that Plaintiff’s proposed structure of “processor and memory” is indefinite and does not connote sufficient structure as that just amounts “to nothing more than a general-purpose computer.” *Id.* at 10. Defendant contends that Plaintiff’s argument that the relevant inquiry is not whether two generic components interact, but rather how those components interact and whether the specification sufficiently discloses that interaction. *Id.*

In its sur-reply, Plaintiff contends that:

Any POSA would understand what structure is involved in causing the relay node to transmit data to a station, and claim 13 expressly states it. As Dr. Cooklev opines, a POSA would understand that the device’s processor would execute computer program code contained in memory to cause a data transmission. Indeed, the claimed invention relates to the transmission of buffering data from a relay node. Data transmission is a basic functionality of the system. In this context, a program instruction to transmit data is a sufficient algorithm for a processor to execute to cause the system to transmit the data. Claim 13 and the patent specification disclose such an instruction, which, when executed by the processor, causes the device to send the data transmission. The specification further discloses how the device operates to send the actual buffer information report. It is unclear what additional disclosure of structure OnePlus contends a POSA would need to sufficiently understand the structure of the disputed claim terms that carries out the recited function of causing the sending of a buffer information report to a system station.

Sur-Reply at 10 (internal citations omitted).

**The Special Master's Analysis:**

Because there is no dispute that Claim 6 is subject to § 112, ¶ 6, the undersigned recommends that Claim 6 is subject to § 112, ¶ 6.

With respect to Claim 13, after carefully considering the parties' arguments and the applicable law, the undersigned agrees with Plaintiff that this term is not subject to § 112, ¶ 6 and should have its plain-and-ordinary meaning for the reasons that follow. **First**, because the term (and, more generally, the claims) do not use the word "means," the presumption is that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1348. **Second**, with respect to the use of "computer program code," "processor," and "memory," the undersigned agrees with Plaintiff that these are well-understood structural components of an electronic device that work together to perform implement the claimed apparatus. By contrast, the undersigned disagrees with Defendant's argument that these terms are "exactly the type of nonce words that invoke § 112, ¶ 6" as Defendant's argument would render virtually all computer-based apparatus inventions to be subject to § 112, ¶ 6. In the absence of any legal authority for such a wide-sweeping conclusion, the undersigned declines to make that conclusion. **Third**, as was the case in *Dyfan*, Plaintiff provided an unrebutted expert declaration for the proposition that "[a]ny POSA would understand what structure is involved in causing the relay node to transmit data to a station." *See Dyfan*, 28 F.4d at 1368.

Therefore, based on the foregoing, the undersigned recommends that the term in Claim 13 is not subject to § 112, ¶ 6 and that it should be construed according to its plain-and-ordinary meaning.

Because the undersigned does not find that this term is subject to § 112, ¶ 6, there is no need to determine the corresponding structure for this term.

Finally, because the “heavy presumption” is a term should be construed according to its plain-and-ordinary meaning and because Defendant has not provided any argument or evidence that this term should not be construed according to its plain-and-ordinary meaning, the undersigned recommends that the term in Claim 13 should be construed according to its plain-and-ordinary meaning.

## **2. What the claimed function is (Claim 6 only)**

Because the parties do not dispute what the claimed function in Claim 6 is, the undersigned recommends “causing sending of a buffer information report to a system station” as the claimed function.

## **3. What the corresponding structure/algorithm is (Claim 6 only)**

### **The Parties’ Arguments:**

The parties appear to agree that the corresponding structure at least includes a processor, but disagree whether an algorithm is required or whether Claim 6 falls within the holding of *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303 (Fed. Cir. 2011). Sur-Reply (Group 1) at 11–12. Plaintiff contends that the same rationale that applied in *In re Katz* also applies here. *Id.* at 12. In particular, Plaintiff argues:

The disputed phrases in claims 6 and 13 of the ’614 patent are directed to causing the sending of a buffer information report—*i.e.*, causing the transmission of data—which can be accomplished by a general purpose processor without special programming. Thus, like in *Katz*, where claiming a means for receiving data did not require an extensive algorithm to support its functionality, the ’614 patent’s recitation of means or components for causing sending of data does not require anything more than what is already disclosed in the patent.

*Id.* By contrast, Defendant contends that the claimed invention uses a general-purpose computer programmed with a specific algorithm in order to implement the claimed function. Reply (Group 1) at 10.

**The Special Master's Analysis:**

With respect to Claim 13, after carefully considering the parties' arguments and the applicable law, the undersigned agrees with Plaintiff for the reason that follows. The claimed function—"causing sending of a buffer information report to a system station"—is extremely simple; it only requires that the corresponding structure cause the transmission of data. The claimed function only requires "causing" the transmission of the buffer information report (data); it notably does not require a more complicated function such as assembling and transmitting the buffer information report. As such, the undersigned agrees with Plaintiff that this does not require any special programming for a general-purpose computer to perform the claimed function and thus falls within the holding of *In re Katz*.

To summarize, the undersigned recommends that Claim 6 is subject to § 112, ¶ 6, while Claim 13 is not. The undersigned further recommends that the claimed function for Claim 6 is "causing sending of a buffer information report to a system station" and that no algorithm is needed as special programming is not required for a general-purpose computer to implement the claimed function.

- F. Term #6 (Group 1): “means for causing sending of an indication to the system station” / “at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus . . . sending of an indication to the system station”**

<b>Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
<p>“means for causing sending of an indication to the system station” (Claim 6) / “at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus . . . sending of an indication to the system station” (Claim 13)</p> <p>U.S. Patent No. 8,767,614, Claims 6, 13</p> <p>Proposed by Defendant</p>	<p>These terms are not indefinite. No construction necessary – plain and ordinary meaning.</p> <p>Claim 13 should not be construed under 35 U.S.C. § 112, ¶ 6. To the extent the Court treats the terms in claims 6 and/or 13 as means-plus-function:</p> <p><b>Function:</b> “for causing sending of an indication to the system station”</p> <p><b>Structure:</b> processor and memory (refer 6:4-9).</p>	<p>This claim should be construed under 35 U.S.C. 112, ¶ 6.</p> <p><b>Function:</b> causing sending of an indication to the system station.</p> <p><b>Structure:</b> none disclosed. 4</p> <p>The claim is indefinite.</p>

### **1. Whether § 112, ¶ 6 applies**

#### **The Parties’ Arguments:**

With respect to Claim 6, the parties agree that the term is subject to § 112, ¶ 6. Opening (Group 1) at 21; Response (Group 1) at 21–23. With respect to Claim 13, the parties make the same arguments for this term as they did for Term #5. *See, e.g.*, Opening (Group 1) at 22, Response at (Group 1) at 21–22.

**The Special Master's Analysis:**

Because there is no dispute that Claim 6 is subject to § 112, ¶ 6, the undersigned recommends that Claim 6 is subject to § 112, ¶ 6.

With respect to Claim 13, after carefully considering the parties' arguments and the applicable law, the undersigned agrees with Plaintiff that this term is not subject to § 112, ¶ 6 and should have its plain-and-ordinary meaning for the same reasons that were described above with respect to Term #5.

**2. What the claimed function is (Claim 6 only)**

Because the parties do not dispute what the claimed function in Claim 6 is, the undersigned recommends "causing sending of an indication to the system station" as the claimed function.

**3. What the corresponding structure/algorithm is (Claim 6 only)**

**The Parties' Arguments:**

With respect to the corresponding structure / algorithm is for Claim 6, the parties make the same arguments for this term as they did for Term #5.

**The Special Master's Analysis:**

After carefully considering the parties' arguments and the applicable law, as was the case for Term #5, the undersigned agrees with Plaintiff that this term does not require any special programming for a general-purpose computer to perform the claimed function and thus falls within the holding of *In re Katz*.

To summarize, the undersigned recommends that Claim 6 is subject to § 112, ¶ 6, while Claim 13 is not. The undersigned further recommends that the claimed function for Claim 6 is



“causing sending of an indication to the system station” and that no algorithm is needed as special programming is not required for a general-purpose computer to implement the claimed function.

**G. Term #7 (Group 1): “the at least one memory and the computer program code are further configured to, with the at least one processor, cause the apparatus to perform at least the following: process an indication that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension”**

Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>“the at least one memory and the computer program code are further configured to, with the at least one processor, cause the apparatus to perform at least the following: process an indication that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension”</p> <p>U.S. Patent No. 8,767,614, Claim 14</p> <p>Proposed by Defendant</p>	<p>Plain and ordinary meaning: This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite.</p> <p>If the Court deems a construction is necessary: “the at least one memory and the computer program code are further configured to, with the at least one processor, cause the apparatus to perform at least the following: process a signal signifying that the buffer size of the intermediate node is extended from that of the user equipment and information of the size of the extension”</p>	<p>This claim should be construed under 35 U.S.C. 112, ¶6.</p> <p><b>Function:</b> indefinite.</p> <p><b>Structure:</b> indefinite. Alternatively: <b>Function:</b> processing an indication that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension.</p> <p><b>Structure:</b> none disclosed. In either instance, the claim is indefinite.</p>

The parties have two main disputes. First, the parties dispute whether this term is subject to § 112, ¶ 6, and if it applies, what the claimed function and corresponding structure are. Second, the parties dispute whether the claim term is indefinite pursuant to § 112, ¶ 2.<sup>18</sup>

### **1. Whether § 112, ¶ 6 applies**

#### **The Parties' Arguments**

The parties dispute whether this term is subject to § 112, ¶ 6. Defendant contends that “[a]lthough claim 14 does not use the term ‘means for,’ it fails to recite ‘sufficiently definite structure’ by using the same nonce language as in claim 13—‘memory,’ ‘computer program code,’ and ‘processor.’” Opening (Group 1) at 23. Plaintiff contends that for all the reasons that it argued for Claim 13, the same reasons apply to Claim 14. Response (Group 1) at 23–24.

#### **The Special Master's Analysis:**

After carefully considering the parties' arguments and the applicable law, as was the case for Terms #5 and #6, the undersigned agrees with Plaintiff that this term is not subject to § 112, ¶ 6.

### **2. Whether the term is indefinite pursuant § 112, ¶ 2**

#### **The Parties' Arguments**

Defendant contends that “process an indication” is indefinite because nothing in the claim explains how to “process” the indication. *Id.* at 24. Defendant also contends that the specification

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<sup>18</sup>The American Invents Act of 2011 changed the numbering of the relevant subsection from § 112, ¶ 2 to § 112(b). Because the substance of the subsection did not change, the undersigned will refer to the relevant subsection as § 112, ¶ 2 in keeping with the numeration at the time of the patent filing.

does not provide any insight into what it means to process a claim. *Id.* (citing '614 Patent at 3:56–57).

In its response, Plaintiff contends that Defendant cannot prove by clear-and-convincing evidence that the phrase “process an indication” is indefinite. Response (Group 1) at 24. Plaintiff contends that a POSITA would understand, from the claim language, that “‘process an indication’ refers to the apparatus—including its processor(s)—processing an indication by taking the information about buffer size into account and performing operations on the data.” *Id.* Plaintiff contends that the specification provides considerable details about the apparatus communicating and taking into account information about buffer size for processing. *Id.* at 24–25 (citing '614 Patent at 6:62–7:1, 7:18–22, 7:30–41).

In its reply, Defendant contends that Plaintiff equates “process” with (1) “taking into account” and (2) “performing an operation on data,” but these “two generic phases add no explanation as to *how* information would be taken into account or how or what operation would be performed on the data.” Reply (Group 1) at 14 (emphasis in original). With respect to the passages from the specification that Plaintiff points to, Defendant contends that the first passage ('614 Patent at 6:62–7:1) provides no information how the indication would be “processed.” *Id.* at 15. Defendant contends that the second passage ('614 Patent at 7:18–22) only describes that buffer information should be included in a report. *Id.* Defendant finally contends that the third passage ('614 Patent at 7:30–41) provides no information how the indication would be “processed.” *Id.*

In its sur-reply, Plaintiff contends that while Defendant does not cite any cases where a court found that “process” or “processing” to be indefinite, while Plaintiff cites to several cases where courts have found those terms to be not indefinite. Sur-Reply (Group 1) at 14–15.

**The Special Master's Analysis:**

After carefully considering the parties' arguments and the applicable law, the undersigned agrees with Plaintiff that this term is not indefinite for at least the following reasons. **First**, the undersigned disagrees with Defendant that the term is indefinite because nothing in the claim explains how to "process" the indication. Based on the undersigned's experience, the word "process" is a well-understood word in the computer arts, that has a broad meaning.<sup>19</sup> It is well-settled law that "breadth is not indefiniteness." *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1367 (Fed. Cir. 2017); *In re Gardner*, 427 F.2d 786, 788 (C.C.P.A 1970) ("Breadth is not indefiniteness."). **Second**, the undersigned agrees with Plaintiff that a POSITA would understand from the claim language that "processing an indication" refers to a processor "taking the information about buffer size into account and performing operations on the data."

For the foregoing reasons, the undersigned finds that Defendant have not carried their burden of clear-and-convincing evidence that a POSITA would not understand the meaning of this term with reasonable certainty. Therefore, the undersigned recommends that this term is not indefinite. Furthermore, because the "heavy presumption" is a term should be construed according to its plain-and-ordinary meaning and because Defendant has not provided any argument or evidence that this term should not be construed according to its plain-and-ordinary meaning, the undersigned recommends that this term should be construed according to its plain-and-ordinary meaning.

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<sup>19</sup> See *supra* note 8.

**H. Term #8 (Group 2): “an importance of parts of channel information for the link adaptation”**

<b>Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“an importance of parts of channel information for the link adaptation”  U.S. Patent No. 9,231,746, Claims 1, 11  Proposed by Defendant	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a priority of parts of channel information for the link adaptation”	Indefinite.

**The Parties’ Arguments:**

In its opening, Defendant contends that this term is indefinite because:

[S]ubdividing channel information based on “an importance of parts of channel information for the link adaptation” is inherently subjective, and would improperly necessitate an inquiry into the minds of the designer or user of the accused article to determine whether the accused “subdividing” was performed based on their subjective view of what is important.

Opening (Group 2) at 7. Defendant contends that “importance” is not defined in the patent. *Id.* Defendant contends that, although the patentee identifies potentially important information, the specification “does not teach how to prioritize the relative importance of such information.” *Id.* at 8–9. Defendant further contends that the “specification further confirms that ‘importance’ cannot be objectively determined because channel information may be prioritized according to static user or manufacturer settings.” *Id.* at 9. Rather, at least according to Defendant, the patent teaches that whether a particular part of the channel information is important “depends on the environment in which the device is being used.” *Id.* at 10–11.

Defendant contends that Plaintiff's alternative proposed construction—which substitutes “priority” for “information”—is “wrong” because even if “certain information may be given priority does not mean that it is more important to link adaptation.” *Id.* at 11. Defendant further contends that Plaintiff's alternative proposed construction does not cure the indefiniteness of this term because “specification does not provide a formula for determining how to assign a ‘priority’ of channel information for the link adaptation” and “what information that should be ‘prioritized’ for link adaptation would still change moment to moment.” *Id.*

In its response, Plaintiff contends that the specification “consistently discloses that the ‘importance’ of the channel information part is based on whether the particular channel information needs to be transmitted reliably for the link adaptation to work correctly.” Response (Group 2) at 7 (quoting ’746 Patent at 2:38–43). Plaintiff contends that “parts of the channel information are prioritized by assigned to them different coding levels having different detection probability levels” and that important parts of the channel have higher detection probability. *Id.* at 7 (citing ’746 Patent at 2:44–65). Based on the foregoing, Plaintiff contends that based on that a POSITA “would understand from the patent’s guidance that the more reliably a part of the channel information needs to be transmitted for link adaptation to work correctly, the more ‘important’ the information is for purposes of the claimed invention and the more it should be prioritized during transmission.” *Id.* at 8.

In its reply, Defendant contends that the term “importance” in the ’746 Patent is “ambiguous as to what ‘parts of channel information’ are of sufficient and relative ‘importance’ to satisfy the limitation.” Reply (Group 2) at 4. According to Defendant, “[t]he importance of channel information, for example, may vary depending on whether a user is interested in higher speed versus more stable data transfer.” *Id.* at 4–5. Defendant reiterates that environment may

affect whether a part of the channel information is more important. *Id.* at 5. Defendant contends that “[e]ach of the examples cited in WSOU’s brief merely describes what can be done with channel information after its “importance” has somehow already been determined.” *Id.* Defendant finally contends that the “prioritizing element does not itself determine of parts of channel information, but rather uses this determination to assign coding levels to parts of channel information according to an importance of these parts.” *Id.* at 6–7 (citing ’746 Patent at 7:38–43).

In its sur-reply, Plaintiff initially contends that Defendant has not met the clear-and-convincing standard and that most of Defendant’s arguments are merely attorney argument. Sur-Reply (Group 2) at 3. Plaintiff contends that the “specification repeatedly describes ‘importance’ as a priority of parts of channel information for the link adaptation based on whether the particular channel information needs to be transmitted reliably for the link adaptation to work correctly” and that a POSITA would “determine ‘importance’ based on which channel information parts should receive priority to allow for reliable link adaptation.” *Id.*

### **The Special Master’s Analysis:**

This was a close call. But after carefully considering the parties’ arguments and the applicable law, the undersigned agrees with Plaintiff that this term is not indefinite for at least the following reasons. **First**, the undersigned finds that a POSITA would be reasonably certain that “importance” is based on the need to transmit reliably. The specification describes that “a part of the link information that is important for the link adaptation to work correctly may be assigned to a coding level having a rather high detection probability. This part of the channel information will be transmitted very reliably.” ’746 Patent at 2:38–42. In other words, this passage describes assigning a coding level, that is likely to have a high detection, to important parts of the channel information, so that it will be transmitted reliably. The specification describes that the result of

reliably transmitting the important part of the channel information is a reliable link adaptation. *Id.* at 2:42–43. Therefore, rather than describing that the “importance” improperly depends on the subjective perception of the user, this passage describes that the “importance” is related to the link adaptation working correctly. A POSITA would understand that this passage provides an objective meaning for the scope of the term as the factors for reliable link adaptation can be objectively determined. As such, this passage provides guidance to a POSITA as to the meaning of “importance” and the context for how it is used in the invention.

**Second**, the undersigned did not find Defendant’s reasons to be persuasive enough to meet the standard of clear-and-convincing evidence. For example, Defendant contends the specification “does not teach how to prioritize the relative importance of such information.” Opening (Group 2) at 8–9. The problem with that argument is that the claim language does not require ascertaining the relative importance, let alone prioritizing/ordering the relative importance. Rather, the claim language recites “subdividing the channel information into multiple parts of channel information according to an importance of parts of channel information for the link adaptation.” ’746 Patent, Cl. 1, Lim. [c]; *see also* ’746 Patent, Cl. 11. The plain language of the claim requires that the claimed subdivision be based on “an” importance. In other words, the claim only requires determining whether a part of the channel information is important or not; it does not require determining the importance of all parts of the channel information and then ranking them as Defendant contends. As a second example, Defendant contends that the patent teaches that whether a particular part of the channel information is important “depends on the environment in which the device is being used.” Opening (Group 2) at 10–11. Defendant’s argument here appears to be that because a particular part of the channel information may be important for a particular set of conditions (*i.e.*, one environment), but not for another set of conditions, the term is indefinite. The



first problem with this argument is that while the environment may affect whether a particular factor is important at that time, a POSITA would understand that the claimed invention is part of telecommunication systems which designed to operate in variable conditions. As such, a POSITA would realize that the importance of a particular part of the channel information is not absolute across all sets of conditions, but may change. More importantly, a POSITA would still be able to determine, for a particular set of conditions, whether a particular part of the channel information is important. Overall, the primary impact that variable conditions have on the claimed invention is that it requires a POSITA to reassess whether part of the channel information is important for each set of conditions. But because a POSITA would be able to do so (for the reasons explained above), variable conditions do not render this claim term to be indefinite.

For the foregoing reasons, the undersigned finds that Defendant have not carried their burden of clear-and-convincing evidence that a POSITA would not understand the meaning of this term with reasonable certainty. Therefore, the undersigned recommends that this term is not indefinite. Furthermore, because the “heavy presumption” is a term should be construed according to its plain-and-ordinary meaning and because Defendant has not provided any argument or evidence that this term should not be construed according to its plain-and-ordinary meaning, the undersigned recommends that this term should be construed according to its plain-and-ordinary meaning.

**I. Term #9 (Group 2): “a lower importance with respect to link adaptation than said at least one part”**

<b>Term</b>	<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“a lower importance with respect to link adaptation than said at least one part”  U.S. Patent No. 9,231,746, Claim 2  Proposed by Defendant	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a lower priority with respect to link adaption than said at least one part”	Indefinite

**The Parties’ Arguments:**

Defendant first contends that the same reasons that applied to Term #8 being indefinite apply also to this term. Opening (Group 2) at 11. Defendant next contends that the patent “does not tether its determination of ‘importance’ to any objective criteria; ‘importance’ can even change, for example, based on whether the device should be providing a ‘fast’ connection.” *Id.* at 11–12. Defendant again contends that the importance of channel information varies depending on the environment. *Id.* at 12. Defendant contends that the specification only uses the term “lower importance” twice, and neither is helpful. *Id.* (citing ’746 Patent at 2:49–50, 4:27–30) (“at higher user speed[] the channel information is highly time variant and, thus, of lower importance than with temporally stable channels.” (alterations in original)).

In its response, Plaintiff also contends that the same reasons that applied to Term #8 being not indefinite also apply to this term. Response (Group 2) at 12. Plaintiff contends that the specification provides guidance on how to objectively determine “whether a part of channel information is of higher or lower importance for link adaptation.” *Id.* (quoting ’746 Patent at 2:18–30, 2:50–58). Based on these passages, Plaintiff contends that “the parts of the channel information

that are less essential to the link adaptation's reliable functionality are generally served at 'best-effort' levels and are not always detected at the receiver." *Id.* at 12–13 (quoting '746 Patent at 2:58–65).

In its reply, Defendant contends that the "portions of the specification cited by WSOU are not relevant" because they do not teach how "an importance of parts of channel information" can be objectively determined. Reply (Group 2) at 7. Rather, Defendant contends that "they describe what should be done after the 'importance of parts of channel information' has already been determined." *Id.*

In its sur-reply, Plaintiff dismisses the arguments Defendant provides in its reply as not being "new substantive arguments." Sur-Reply (Group 2) at 4.

#### **The Special Master's Analysis:**

After carefully considering the parties' arguments and the applicable law, the undersigned agrees with Plaintiff that this term is not indefinite for the same reasons as were described for Term #8.

The only substantive difference between Term #8 and Term #9 is that the latter includes the word "lower," but Defendant does not appear to contend that this word is indefinite. As such, and also because the specification uses "lower" according to its plain-and-ordinary meaning (*i.e.*, "lesser"), the term "lower" is not indefinite.

#### **J. Term #10 (Group 2): "a coding level of said multilevel coding" / "coding level"**

Prior to the *Markman* hearing, the undersigned provided a preliminary construction of plain-and-ordinary meaning based on the parties' aforementioned briefs. During the hearing, the undersigned determined that, while there did not appear to be a dispute as to the plain-and-ordinary

meaning, a lay jury may have difficulty understanding the meaning of “coding level” and “multilevel coding.” Hrg. Tr. at 119:7–9. Accordingly, the undersigned asked the parties to provided updated proposed constructions. The first sub-section below summarizes and analyzes the parties’ arguments in their briefs while the second sub-section does the same for the updated proposed constructions regarding the plain-and-ordinary meaning.

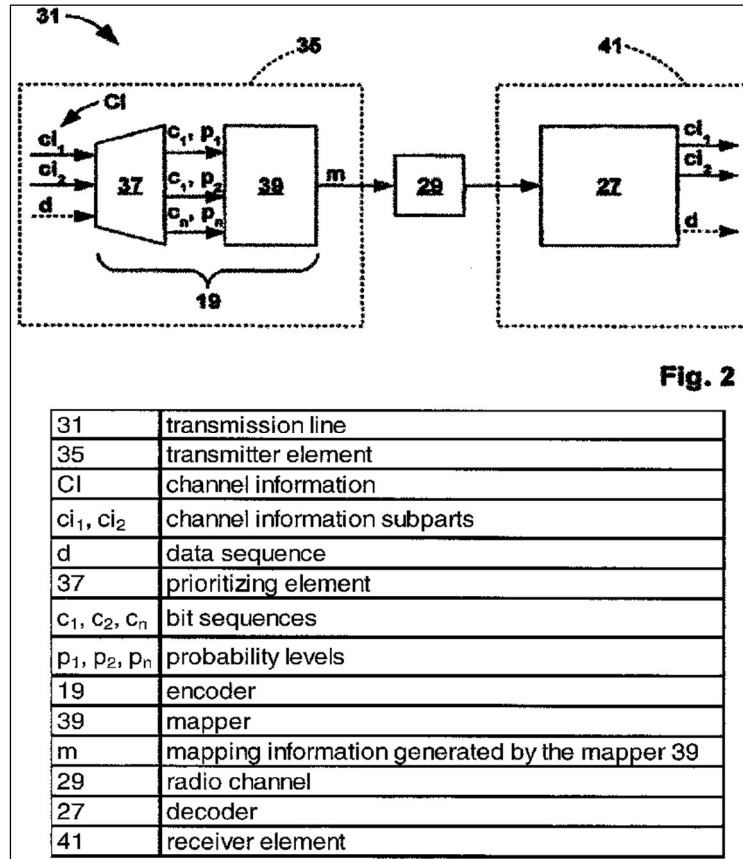
### 1. Arguments with respect to the Parties’ original proposed constructions

Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“a coding level of said multilevel coding” / “coding level”  U.S. Patent No. 9,231,746, Claims 1, 2, 3, 11  Proposed by Defendant	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a coding level of said multilevel coding” / “coding level”	“a distinct detection probability level”

### The Parties’ Arguments:

Defendant contends that the abstract and specification supports its proposed construction that a “coding level” is a “distinct detection probability level.” Opening (Group 2) at 12–15 (quoting ’746 Patent at Abstract, 2:9–10 (“Preferably, each coding level corresponds to a level of a detection probability”), 2:18–20, 2:27–28, 2:50–53 (“in other words, the parts of the channel information are prioritized by assigning to them different coding levels having different detection probabilities”), and 8:40–47). Defendant contends that Figures 2, 3, and 4 also support its proposed construction. *Id.* at 14–15. For example, Defendant contends that Figure 2 depicts that multilevel coding is implemented by mapper 39 which maps “bit sequences  $c_1, c_2, \dots, c_n$  of channel

information CI to modulation symbols such that the above-mentioned condition regarding the detection probability levels  $p_1, p_2, \dots, p_n$  holds.” *Id.* at 14 (citing ’746 Patent at 7:57–60).



’746 Patent at Fig. 2.

Finally, Defendant contends that “construction of ‘coding levels’ that is not tied to distinct detection probability levels would effectively eviscerate the ‘multilevel coding’ limitation. Opening (Group 2) at 15–16. More specifically, Defendant contends that “[i]f ‘a coding level’ referred to any categorization based on any conceivable criteria, this multi-level coding would not accomplish the goals of the invention and would be rendered meaningless, effectively reading [coding level] out of the claims.” *Id.* at 16.

In Plaintiff contends that Defendant is trying to replace “coding level” with “distinct detection probability level.” Response (Group 2) at 15–16; *see also* Sur-Reply (Group 2) at 13–14 (contending that the patent does not state that the coding level is the same thing as a detection probability level). Plaintiff contends that the specification and Claim 1, by contrast, “disclose that each coding level can correspond to or allow for a level of detection probability of the bit sequence of the coding level.” Response (Group 2) at 14 (citing ’746 Patent at 2:9–14, Cl. 1). Plaintiff contends that the specification “discloses a coding level ‘0, ... , n’ bit sequence as ‘ $c_1, c_2, \dots, c_n$ ’ and a detection probability level as ‘ $p_1, p_2, \dots, p_n$ ’—showing that they are not the same thing.” *Id.* (citing ’746 Patent at 7:38–48).

With respect to Defendant’s proposed construction, Plaintiff contends that Defendant has not explained why plain-and-ordinary meaning is inadequate. *Id.* at 14–15. Plaintiff further contends that the “claims require ‘multi-level coding’ regardless of the construction of ‘coding level.’” *Id.* at 15. Plaintiff finally contends that Defendant’s proposed construction seeks to improperly equate “coding level” with “distinct detection probability level.” *Id.*

In its reply, Defendant contends that Plaintiff does not contest that “the patent’s stated goal is to ‘adapt the detection probability to the importance of C[hannel] I[n]formation’ and to ‘reliably and efficiently transfer the channel information between different network nodes.’” Reply (Group 2) at 8 (omitting internal citations). Defendant then argues that “the specification makes clear that this objective is achieved by assigning channel information to coding levels each with a distinct detection probability level.” *Id.* at 8 (citing ’746 Patent at 2:51–53, 7:37–39).

Defendant contends that Plaintiff’s argument that the term does any clarification is incorrect because “if the claimed ‘coding levels’ referred to any categorization based on any

conceivable criteria, as WSOU contends, then this multi-level coding would not accomplish the goals of the invention and would be rendered meaningless.” *Id.* at 9.

Defendant finally contends that the passages Plaintiff cites supports Defendant’s proposed construction. *Id.* at 10. Defendant contends that Figure 2, as one example, “confirms that the ‘channel information subparts’ (*e.g.*, ci1) are each assigned a code level (*e.g.*, c1) with a distinct detection probability level (*e.g.*, p1).” *Id.* Defendant concludes by arguing that “[n]owhere does the patent describe a code level that is not tied to a distinct detection probability level, and WSOU does not contend otherwise.” *Id.*

In its sur-reply, Plaintiff contends that the claim language is clear that “‘multi-level coding’ is comprised of multiple independent bit sequences.” Sur-Reply (Group 2) at 5. Plaintiff further contends that while the specification “discloses that each coding level can correspond to ... a level of detection probability of the bit sequence of the coding level, it never states that the coding level is the same thing as a detection probability level or otherwise defines ‘coding level’ in the manner OnePlus asserts.” *Id.*

Plaintiff responds that Defendant “exaggerates the importance of the purported ‘objective of the claimed invention’ in the claim construction process.” *Id.* at 5. Rather, Plaintiff contends that “[t]he court’s task is not to limit claim language to exclude particular devices because they do not serve a perceived ‘purpose’ of the invention.” *Id.* at 5–6 (quoting *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1370 (Fed. Cir. 2003)).

### **The Special Master’s Analysis:**

After carefully considering the parties’ arguments and the applicable law, the undersigned agrees with Plaintiff that this term is not indefinite for at least the following reasons. ***First***, the

“heavy presumption” is that a term should be construed as having its plain-and-ordinary meaning. *Omega*, 334 F.3d at 1323 (“We indulge a ‘heavy presumption’ that claim terms carry their full ordinary and customary meaning unless the patentee unequivocally imparted a novel meaning to those terms or expressly relinquished claim scope during prosecution.” (internal citation omitted)).

**Second**, Defendant does not appear to argue that the patentee acted as his/her own lexicographer and/or there was a disclaimer in the specification or during prosecution. *Thorner*, 669 F.3d at 1365 (the “only two exceptions to [the] general rule” that claim terms are construed according to their plain-and-ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) “disavows the full scope of the claim term either in the specification or during prosecution.”).

**Third**, Defendant’s proposed construction incorrectly limits the scope of the claim term to the disclosed embodiments. *Liebel-Flarsheim*, 358 F.3d at 913 (“[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.”). More specifically, while the specification discloses an embodiment where there is 1:1 correlation between code levels and distinct probability levels, the specification does not purport to limit the invention to only a 1:1 correlation. **Fourth**, the specification discloses both “coding levels” and “detection probability levels,” which are two separate things. Defendant’s proposed construction erases this difference.

For at least the above reasons, the undersigned finds that the correct construction is plain-and-ordinary meaning. That said, because a lay jury may have difficulty understanding the meaning of “coding level” and “multilevel coding,” as described above, the undersigned asked the parties to provide more detailed proposed construction as to the meaning of this term.



**2. Parties' updated proposed constructions regarding the plain-and-ordinary meaning**

<b>Term</b>	<b>Plaintiff's Proposed Construction</b>	<b>Defendants' Proposed Construction</b>
"a coding level of said multilevel coding" / "coding level"  U.S. Patent No. 9,231,746, Claims 1, 2, 3, 11  Proposed by Defendant	"coding level" = "a parameter that could, but does not necessarily, correlate to a detection probability"	Plain and ordinary meaning, wherein each "coding level" has a distinct detection probability.

**The Parties' Arguments:<sup>20</sup>**

Plaintiff contends that its updated proposed construction "accounts for the potential correlation between a coding level and a detection probability." Plaintiff further contends that "although a 'coding level' can correspond to a 'detection probability,' the intrinsic record does not equate them and indeed makes clear that they are different parameters." *See, e.g., '746 Patent at 7:35–52, 7:53–63, 10:48–55, Fig. 2.* With respect to Defendant's updated proposed construction, Plaintiff contends that it is essentially identical to Defendant's original proposed construction, which the undersigned preliminarily rejected.

In support of its updated proposed construction, Defendant mainly repeats the arguments it provided in its briefs, namely, that 1) the specification repeatedly confirms that a coding level necessarily has an associated detection probability, 2) in each instance where the patent refers to a coding level, it is associated with a detection probability, 3) the claimed invention is only able to achieve its objective because each coding level has a distinct detection probability, and 4) the

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<sup>20</sup> In addition to e-mailing the undersigned updated proposed constructions, the parties also e-mailed short position statements in support of their updated proposed constructions.

citations Plaintiff relies upon confirm that each coding level has a detection probability. With respect to Plaintiff's proposed construction, Defendant contends that it "is not really a construction at all" and that "[a] construction that a coding level may or may not correlate to a detection probability ... contradicts the specification."

**The Special Master's Analysis:**

The undersigned agrees with Plaintiff that Defendant's updated proposed construction essentially repeats Defendant's original proposed construction. As such, for the reasons described above, the undersigned also rejects Defendant's updated proposed construction.

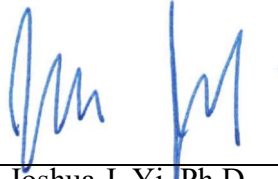
With respect to Plaintiff's updated proposed construction, as described above, because the specification does not purport to limit the invention to only a 1:1 correlation, Plaintiff's updated proposed construction appears to be correct. As such, the undersigned incorporates Plaintiff's updated proposed construction into the recommended construction as follows: Plain-and-ordinary meaning wherein the plain-and-ordinary meaning is "a parameter that could, but does not necessarily, correlate to a detection probability."

**IV. CONCLUSION**

For the reasons described herein, the undersigned recommends that the Court adopt the following recommended constructions.

Pursuant to the Order Appointing Special Master (Dkt. No. 53), the parties may, in a manner mirroring Federal Rule of Civil Procedure 72 and 28 U.S.C. § 636, file timely objections to any of the findings, conclusions, and recommendations contained in this Report.

**SIGNED** on the 24th day of May, 2022.



Joshua J. Yi, Ph.D.

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Special Master's Recommended Construction
<p>#1 (Group 1): “varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station”</p> <p>U.S. Patent No. 7,477,876, Claim 1</p> <p>Proposed by Defendant</p>	<p>Plain and ordinary meaning, which is: varying a rate for reporting information about the status of the communication channel from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station</p> <p><b><u>Updated construction:</u></b>  “varying a rate for reporting information about the status of the communication channel from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station, and not solely based on the content of the data transmission”</p>	<p>“varying a rate for reporting channel quality information from a mobile station to a base station using only the mobile station’s detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate, and not varying the rate based on the content of the data transmission or any other message or signal instructing such action.”</p> <p><b><u>Updated construction:</u></b>  “data transmission” should be construed according to its plain and ordinary meaning, except that it does not include an instruction, such as a control signal</p>	<p>Plain-and-ordinary meaning<sup>1</sup></p> <p><b><u><sup>1</sup> Notes not for the jury:</u></b></p> <ol style="list-style-type: none"> <li>1) The plain-and-ordinary meaning of “function of” includes what follows, but is not limited only to what follows.</li> <li>2) The plain-and-ordinary meaning of “data transmission” excludes control signals/instructions.</li> </ol>
<p>#2 (Group 1): “[transmitter] attempting access to a wireless network” (Claim 1) / “transmitter configured to attempt access to a wireless network...” (Claim 10)</p> <p>U.S. Patent No. 8,149,776, Claims 1, 10</p> <p>Proposed by Defendant</p>	<p>Plain and ordinary meaning. This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite.</p>	<p>This claim should be construed under 35 U.S.C. 112, ¶ 6.</p> <p><b>Function:</b> attempting access to a wireless network by sending on a random access channel at a first transmit power a first preamble comprising a signature sequence and by randomly selecting the signature</p>	<p>Not subject to § 112, ¶ 6. Plain-and-ordinary meaning.</p>

		sequence from a set of signature sequences  <b>Structure:</b> none disclosed. The claim is indefinite.	
#3 (Group 1): “processor”  U.S. Patent No. 8,149,776, Claims 10, 11, 12, 14, 15, 16, 18, 19 Proposed by Defendant	Plain and ordinary meaning. This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite.	This claim should be construed under 35 U.S.C. 112, ¶ 6.  <b>Function:</b> determining that access attempts are unsuccessful  <b>Structure:</b> none disclosed. The claim is indefinite.	Not subject to § 112, ¶ 6. Plain-and-ordinary meaning.
#4 (Group 1): “program of instructions”  U.S. Patent No. 8,149,776, Claim 19  Proposed by Defendant	Plain and ordinary meaning. This claim should not be construed under 35 U.S.C. 112, ¶ 6, nor is it indefinite.	Preamble limiting; This claim should be construed under 35 U.S.C. 112, ¶ 6.  <b>Function:</b> attempting access to a wireless network by sending a signature sequence on a random access channel  <b>Structure:</b> none disclosed. The claim is indefinite.	Preamble is limiting.  Plain-and-ordinary meaning.
#5 (Group 1): “means for causing sending of a buffer information report to a system station” (Claim 6) “at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus ... sending of a	These terms are not indefinite. No construction necessary – plain and ordinary meaning.  Claim 13 should not be construed under 35 U.S.C. § 112, ¶ 6. To the extent the Court treats the terms as means-plus-function:	This claim should be construed under 35 U.S.C. 112, ¶6.  <b>Function:</b> causing sending of a buffer information report to a system station.  <b>Structure:</b> none disclosed. The claim is indefinite.	<b><u>Claim 6:</u></b> Subject to § 112, ¶6  <b>Function:</b> causing sending of a buffer information report to a system station.  <b>Structure:</b> Pursuant to <i>In re Katz</i> , the data processing unit 32, memory 31, and

<p>buffer information report to a system station” (Claim 13).</p> <p>U.S. Patent No. 8,767,614, Claims 6, 13</p> <p>Proposed by Defendant</p>	<p><b>Function:</b> “for causing sending of a buffer information report”</p> <p><b>Structure:</b> processor and memory (refer 6:4-9).</p>		<p>input/output interface 34 in Fig. 3, and equivalents.</p> <p><b>Claim 13:</b> Not subject to § 112, ¶ 6. Plain-and-ordinary meaning</p>
<p>#6 (Group 1): “means for causing sending of an indication to the system station” (Claim 6) “at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus . . . sending of an indication to the system station” (Claim 13)</p> <p>U.S. Patent No. 8,767, 614, Claims 6, 13</p> <p>Proposed by Defendant</p>	<p>These terms are not indefinite. No construction necessary – plain and ordinary meaning.</p> <p>Claim 13 should not be construed under 35 U.S.C. § 112, ¶ 6. To the extent the Court treats the terms in claims 6 and/or 13 as means-plus-function:</p> <p><b>Function:</b> “for causing sending of an indication to the system station”</p> <p><b>Structure:</b> processor and memory (refer 6:4-9).</p>	<p>This claim should be construed under 35 U.S.C. 112, ¶6.</p> <p><b>Function:</b> causing sending of an indication to the system station.</p> <p><b>Structure:</b> none disclosed. 4 The claim is indefinite.</p>	<p><b>Claim 6:</b> Subject to § 112, ¶6</p> <p><b>Function:</b> causing sending of an indication to a system station.</p> <p><b>Structure:</b> Pursuant to <i>In re Katz</i>, the data processing unit 32, memory 31, and input/output interface 34 in Fig. 3, and equivalents.</p> <p><b>Claim 13:</b> Not subject to § 112, ¶ 6. Plain-and-ordinary meaning</p>
<p>#7 (Group 1): “the at least one memory and the computer program code are further configured to, with the at least one processor, cause the apparatus to perform at least the following: process an indication that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension” (Claim 14)</p>	<p>Plain and ordinary meaning: This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite.</p> <p>If the Court deems a construction is necessary: “the at least one memory and the computer program code are further configured to, with the at least one</p>	<p>This claim should be construed under 35 U.S.C. 112, ¶6.</p> <p><b>Function:</b> indefinite.</p> <p><b>Structure:</b> indefinite. Alternatively: <b>Function:</b> processing an indication that the buffer size of the node for relaying is extended from that of the</p>	<p>Not subject to § 112, ¶ 6. Not indefinite. Plain-and-ordinary meaning.</p>

U.S. Patent No. 8,767, 614, Claim 14  Proposed by Defendant	processor, cause the apparatus to perform at least the following: process a signal signifying that the buffer size of the intermediate node is extended from that of the user equipment and information of the size of the extension”	user equipment and information of the size of the extension.  <b>Structure:</b> none disclosed. In either instance, the claim is indefinite.	
#8 (Group 2): “an importance of parts of channel information for the link adaptation”  U.S. Patent No. 9,231,746, Claims 1, 11  Proposed by Defendant	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a priority of parts of channel information for the link adaptation”	Indefinite.	Not indefinite. Plain-and-ordinary meaning.
#9 (Group 2): “a lower importance with respect to link adaptation than said at least one part”  U.S. Patent No. 9,231,746, Claim 2  Proposed by Defendant	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a lower priority with respect to link adaption than said at least one part”	Indefinite	Not indefinite. Plain-and-ordinary meaning.
#10 (Group 2): “a coding level of said multilevel coding” / “coding level”  U.S. Patent No. 9,231,746, Claims 1, 2, 3, 11  Proposed by Defendant	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a coding level of said multilevel coding” / “coding level”  <b>Updated construction:</b> “coding level” = “a parameter that could, but does not necessarily, correlate to a detection probability”	“a distinct detection probability level”  <b>Updated construction:</b> Plain and ordinary meaning, wherein each “coding level” has a distinct detection probability.	Plain-and-ordinary meaning wherein the plain-and-ordinary meaning is “a parameter that could, but does not necessarily, correlate to a detection probability.”